

CLAIM AMENDMENTS

1. (Currently amended) A method of re-evaluating an order of a plurality of ads, the method comprising:

receiving the plurality of ads at a client, wherein each of the ads is associated with a respective placement value, and wherein at least one of the ads is associated with a respective weight value;

at the client, receiving a plurality of ad control files, wherein each ad control file is associated with a respective ad of the plurality of ads, wherein each ad control file identifies one or more parameters, and wherein one or more of the identified parameters is a trigger parameter;

at the client, maintaining a trigger table that includes at least one trigger parameter added to the trigger table from the ad control files, wherein each trigger parameter of the trigger table is associated with one or more ads of the plurality of ads; and

at the client, updating a parameter, checking the trigger table to determine if the updated parameter is a trigger parameter for any ad of the plurality of ads, and if so, re-evaluating the placement value of each ad of the plurality of ads, and thereafter

~~receiving a notification of a change of viewing context in the client; and~~
~~in response to receiving the notification,~~ re-evaluating the order of the plurality of ads[[,]] to determine a next ad to be displayed,

wherein the order of the plurality of ads is indicated by a data structure, and

wherein re-evaluating the order of the plurality of ads includes (i) ~~re-determining the placement value associated with each of the ads,~~ (ii) for each of the at least one of the

ads associated with a respective weight value, multiplying the re-evaluated ~~determined~~ placement value associated with that ad by the weight value associated with that ad so as to determine a weighted placement value for that ad, and (ii) ~~[(iii)]~~placing each ad associated with a weight value on the data structure in accordance with the weighted placement value for that ad.

2. (Currently amended) The method of claim 68, ~~[[1,]]~~wherein the change of viewing context in the client reflects a change in a video stream being viewed by a user of the client.

3. (Previously Presented) The method of claim 2, wherein the change of viewing context in the client includes a channel change.

4. (Cancelled)

5. (Currently amended) The method of claim 1,
wherein re-evaluating the order_{of} the plurality of ads includes re-ordering the data structure, and
wherein the data structure contains pointers to ads of the plurality of ads.

6. (Cancelled)

7. (Currently amended) The method of claim 1, wherein re-evaluating the order ~~the re-evaluation of the ordering~~ of the plurality of ads further includes evaluating ~~evaluation of~~ an interpreted placement rule for at least some of the ads.

8. (Original) The method of claim 1, wherein the client is a video replay system.

9-10. (Cancelled)

11. (Currently amended) The method of claim 1, wherein the next ad to be displayed is an ~~the~~ ad at the top of the data structure after re-evaluating ~~re-evaluation of the order~~ ~~ordering~~ of the plurality of ads.

12. (Previously Presented) The method of claim 61, wherein receiving the ad request includes receiving the ad request asynchronously to receiving the notification of the change of viewing context in the client.

13. (Previously Presented) The method of claim 61, wherein sending the determined next ad to be displayed includes sending an ad on the top of the data structure.

14. (Previously Presented) The method of claim 61, wherein sending the determined next ad to be displayed includes sending a next ad having a highest

weighted placement value in accordance with a placement rule and a weight rule of the ad.

15. (Previously Presented) The method of claim 61, further comprising:
re-evaluating the ordering of the plurality of ads after an ad is returned in response to the ad request.

16. (Cancelled)

17. (Original) The method of claim 1, wherein the next ad to be displayed is a full-page ad.

18. (Original) The method of claim 1, wherein the next ad to be displayed is a banner ad.

19. (Previously Presented) The method of claim 1, wherein the next ad to be displayed is an ad displayable in a predetermined location on a display device.

20. (Currently amended) The method of claim 1, wherein each ad of the plurality of ads has an associated rule set containing a placement rule and at least one local parameter value.

21. (Currently amended) The method of claim 1, wherein at least one ad of the plurality of ads has an associated placement rule.

22. (Currently amended) The method of claim 1, wherein at least one ad of the plurality of ads has an associated weight rule.

23. (Currently amended) The method of claim 1, wherein at least one ad of the plurality of ads has an associated expiration rule.

24-30. (Cancelled)

31. (Previously Presented) The method of claim 61, further comprising:
at the client, entering a pause mode to pause currently viewed programming,
wherein sending the determined next ad includes sending the determined next ad when the client enters the pause mode.

32-37. (Cancelled).

38. (Currently amended) A method of displaying an ad on a client-side machine, comprising:

storing a plurality of ads on the client-side machine, wherein each of the ads is associated with a respective placement value, and wherein at least one of the ads is associated with a respective weight value;

at the client-side machine, receiving a plurality of ad control files, wherein each ad control file is associated with a respective ad of the plurality of ads, wherein each ad control file identifies one or more parameters, and wherein one or more of the identified parameters is a trigger parameter;

at the client-side machine, maintaining a trigger table that includes at least one trigger parameter added to the trigger table from the ad control files, wherein each trigger parameter of the trigger table is associated with one or more ads of the plurality of ads;
and

at the client-side machine, updating a parameter, checking the trigger table to determine if the updated parameter is a trigger parameter for any ad of the plurality of ads, and if so, re-evaluating the placement value of each ad of the plurality of ads, and thereafter

re-evaluating an order of the plurality of ads so as to determine a next ad to be displayed; and

displaying the next ad to be displayed when the client-side machine encounters an ad display opportunity,

wherein the order of the plurality of ads is indicated by a data structure, and

wherein re-evaluating the order of the ads includes: (i) ~~re-determining the placement value associated with each of the ads,~~ (ii) for each of the at least one of the ads associated with a respective weight value, multiplying the re-evaluated ~~determined~~ placement value associated with that ad by the weight value associated with that ad so as to determine a weighted placement value for that ad, and (ii) ~~[(iii)]~~placing each ad

associated with a weight value on the data structure in accordance with the weighted placement value for that ad.

39. (Previously Presented) The method of claim 38, wherein the ad display opportunity occurs when a user pauses a currently viewed program.

40. (Withdrawn) The method of claim 38, wherein the ad display opportunity is display of a programming guide.

41. (Withdrawn) The method of claim 38, wherein the ad display opportunity is display of a zone programming guide.

42-48. (Cancelled)

49. (Currently amended) A computer program product, comprising instructions executable by a processor and stored on a computer readable medium, to effect a method comprising:

storing a plurality of ads, wherein each of the ads is associated with a respective placement value, and wherein at least one of the ads is associated with a respective weight value;

receiving a plurality of ad control files, wherein each ad control file is associated with a respective ad of the plurality of ads, wherein each ad control file identifies one or

more parameters, and wherein one or more of the identified parameters is a trigger parameter;

maintaining a trigger table that includes at least one trigger parameter added to the trigger table from the ad control files, wherein each trigger parameter of the trigger table is associated with one or more ads of the plurality of ads;

updating a parameter, checking the trigger table to determine if the updated parameter is a trigger parameter for any ad of the plurality of ads, and if so, re-evaluating the placement value of each ad of the plurality of ads, and thereafter

~~receiving a notification of a change of viewing context in a client;~~

~~in response to receiving the notification of the change in viewing context in the client;~~ re-evaluating an order of the plurality of ads to determine a next ad to be displayed;

receiving an ad request from a requesting application; and

in response to receiving the ad request, sending the determined next ad to be displayed ~~from the ad placement engine~~ to the requesting application,

wherein the order of the ads is indicated by a data structure, and

wherein re-evaluating the order of the plurality of ads includes: (i) ~~re-determining the placement value associated with each of the ads,~~ (ii) for each of the at least one of the ads associated with a respective weight value, multiplying the re-evaluated ~~determined~~ placement value associated with that ad by the weight value associated with that ad so as to determine a weighted placement value for that ad, and (ii) ~~[(iii)]~~ placing each ad associated with a weight value on the data structure in accordance with the weighted placement value for that ad.

50. (Previously Presented) The computer program product of claim 49, wherein the client is a video replay system, and wherein the computer readable medium is within the video replay system.

51. (Currently amended) A computer program product, comprising instructions executable by a processor and stored on a computer readable medium, to effect a method comprising:

storing a plurality of ads on a video replay unit, wherein each of the ads is associated with a respective placement value, and wherein at least one of the ads is associated with a respective weight value;

receiving a plurality of ad control files, wherein each ad control file is associated with a respective ad of the plurality of ads, wherein each ad control file identifies one or more parameters, and wherein one or more of the identified parameters is a trigger parameter;

maintaining a trigger table that includes at least one trigger parameter added to the trigger table from the ad control files, wherein each trigger parameter of the trigger table is associated with one or more ads of the plurality of ads;

updating a parameter, checking the trigger table to determine if the updated parameter is a trigger parameter for any ad of the plurality of ads, and if so, re-evaluating the placement value of each ad of the plurality of ads, and thereafter

re-evaluating an order of the plurality of ads so as to determine a next ad to be displayed; and

encountering an ad display opportunity and responsively displaying
the next ad to be displayed ~~when the video replay unit encounters an ad display~~
~~opportunity,~~

wherein the order of the plurality of ads is indicated by a data structure, and

wherein re-evaluating the order of the plurality of ads includes: (i) ~~re-determining~~
~~the placement value associated with each of the ads,~~ (ii) for each of the at least one of the
ads associated with a respective weight value, multiplying the re-evaluated ~~determined~~
placement value associated with that ad by the weight value associated with that ad so as
to determine a weighted placement value for that ad, and (ii) ~~[(iii)]~~ placing each ad
associated with a weight value on the data structure in accordance with the weighted
placement value for that ad.

52. (Previously Presented) The computer program product of
claim 51, wherein the ad display opportunity occurs when a user pauses a currently
viewed program.

53. (Withdrawn) The computer program product of claim 51,
[[50,]] wherein the ad display opportunity is display of a programming guide,

54. (Withdrawn) The computer program product of claim 51,
[[50,]] wherein the ad display opportunity is display of a zone programming guide.

55. (Previously Presented) The method of claim 1, wherein the weight value associated with at least one of one of the ads associated with a weight value is a constant weight or an increasing weight proportionate to time passed.

56. (Previously Presented) The method of claim 38, wherein the weight value associated with at least one of one of the ads associated with a weight value is a constant weight or an increasing weight proportionate to time passed.

57-58. (Cancelled)

59. (Previously Presented) The computer program product of claim 49, wherein the weight value associated with at least one of one of the ads associated with a weight value is a constant weight or an increasing weight proportionate to time passed.

60 (Previously Presented) The computer program product of claim 51, wherein the weight value associated with at least one of one of the ads associated with a weight value is a constant weight or an increasing weight proportionate to time passed.

61. (Currently amended) The method of claim 68, [[1,]]further comprising:
receiving an ad request from a requesting application; and
in response to receiving the ad request, sending to the requesting application the determined next ad to be displayed.

62. (Previously Presented) The method of claim 1, wherein the data structure is a heap data structure.

63. (Previously Presented) The method of claim 38, wherein the data structure is a heap data structure.

64-65. (Cancelled)

66. (Previously Presented) The computer program product of claim 49, wherein the data structure is a heap data structure.

67. (Previously Presented) The computer program product of claim 51, wherein the data structure is a heap data structure.

68. (New) The method of claim 1, wherein at least one trigger parameter of the trigger table is associated with two or more ads.

69. (New) The method of claim 1, wherein a trigger parameter of the plurality of trigger parameters is selected from the group consisting of (i) a parameter that indicates time of day, (ii) a parameter indicating day of week, (iii) a parameter indicating day of month, (iv) a parameter indicating day of year, and (v) a parameter indicating month of year.

70. (New) The method of claim 1, wherein at least one ad control file of the plurality of ad control files is encoded in XML format.

71. (New) The method of claim 1, wherein each of the ad control files comprises a rule set that describes the ad associated with the ad control file.

72. (New) The method of claim 71, wherein a rule set of a given ad control file comprises a rule for determining an expiration date of the ad associated with the ad control file.

73. (New) The method of claim 38, further comprising:
after displaying the next ad to be displayed, logging information at the client-side machine, wherein the logged information indicates that next ad to be displayed has been displayed, and

passing the logged information from the client-side machine to a server that provided the plurality of ads to the client-side machine.

74. (New) The method of claim 1,
wherein each ad control file includes an ad placement value rule, and
wherein re-valuating the placement value of each ad is carried out in accordance with the ad placement value rule in the ad control file associated with the ad.

75. (New) The method of claim 38,

wherein each ad control file includes an ad placement value rule, and
wherein re-valuating the placement value of each ad is carried out in accordance
with the ad placement value rule in the ad control file associated with the ad.

76. (New) The method of claim 49,
wherein each ad control file includes an ad placement value rule, and
wherein re-valuating the placement value of each ad is carried out in accordance
with the ad placement value rule in the ad control file associated with the ad.

77. (New) The method of claim 51,
wherein each ad control file includes an ad placement value rule, and
wherein re-valuating the placement value of each ad is carried out in accordance
with the ad placement value rule in the ad control file associated with the ad.

78. (New) The method of claim 1, wherein client receives the plurality of ads
and the plurality of ad control files from a remote server.

79. (New) The method of claim 38, wherein client receives the plurality of
ads and the plurality of ad control files from a remote server.